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Communications will be welcomed from any quarter. Abstracts of scientific papers are solicited, and twenty copies of the issue containing such will be mailed the author on request in advance. Rejected manuscripts will be returned to the authors only when the requisite amount of postage accompanies the manuscript. Whatever is intended for insertion must be authenticated by the name and address of the writer; not necessarily for publication, but as a guaranty of good faith. We do not hold ourselves responsible for any view or opinions expressed in the communications of our correspondents.

Attention is called to the "Wants" column. All are invited to use it in soliciting information or seeking new positions. The name and address of applicants should be given in full, so that answers will go direct to them. The "Exchange" column is likewise open.

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CORNELL AND THE LOST WILL.

THE newspapers are publishing the customary type of absurd stories about the history and loss of the great bequest of Mrs Jennie McGraw Fiske, which has just been lost to Cornell University through the operation of a technicality in law, and the active exertions of her surviving husband and of the next of kin, who brought suit to secure what they, and all the world, knew that they were not given by the deceased owner of the property. The true history of the case in brief, as we obtain it from a reliable source, is the following:—

John McGraw was, at the time of his death, an old lumberman who had made an enormous fortune in the North-west, working in company with Henry W. Sage, Hiram Sibley, and a few other equally successful comrades and friends. He was a friend and fellow trustee with Ezra Cornell at the founding of Cornell University, and took great interest in that now great institution of learning. He contributed largely to its treasury and needs, in its early days, and finally died with fortune unimpaired, leaving it mainly to his only child, Jennie. Miss McGraw had grown up in the midst of the little circle of wealthy and liberal men who did so much to make the university what it is, and from them (for she was intimate with all) had received her inspiration. When her father built what is now known as McGraw Hall, the largest building of the dozen scattered over the great campus, the child asked the privilege of contributing the beautiful chime of bells which now hangs in its tower, and calls the students to their daily tasks.

This interest she never lost: it increased, rather than decreased with time.

Miss McGraw, a few years before her death, lost her health, and remained in a critical condition to the end. Meantime she had made the acquaintance of the librarian of the university, Professor Fiske, and after a time, becoming interested in each other, they were married, and the professor took his bride to Europe in the vain hope that her health might be restored. She failed steadily, and finally returned with her husband to her home on the university campus, to die. Her death took place within a few days of their return.

Meantime, under her directions, a large and beautiful house had been built on a commanding site between the university and the bank of Cayuga Lake, which was never occupied; the couple living, in the interval, in a modest little cottage, still standing within the university grounds. A pre-nuptial contract had been entered into between the affianced pair, by which Mrs. Fiske was permitted to dispose of her millions as she might choose, and which provided properly for her husband in case of her death. At her death it was found that a will had also been made, giving liberally to the natural heirs, and leaving her husband \$300,000 and personal property. The university was given \$40,000 to found a hospital; and the residue of the estate, now amounting to nearly two millions of dollars, after paying legacies, was to be devoted to the building and endowment of a library for the university. All legacies were promptly paid by the executor, and the balance of the estate was in process of conversion into the university treasury, when suit was brought by the husband to break the will,—a suit in which he was presently joined by the heirs, to whom, as well as to the husband, liberal legacies had been paid.

It appeared that a clause existed in the charter of the university, limiting its holdings of property to a gross amount of \$3,000,000. This had been inserted in the document at the first, and had never been removed, although it must have been known that the holdings were approaching perilously near this limit. The plaintiffs in the case asserted that the university already possessed so nearly this amount—above \$2,000,000, as they stated—that it was legally debarred from accepting the gift of Mrs. Fiske; and the property must therefore go to the next of kin. The trustees and the executor of the will, as defendants, asserted that this was not the fact, the property inventoried including large amounts held in trust for the State, and not the property of the university, though its income was pledged to the university for educational purposes. Other and technical defences were raised by the defendants. No one, on either side, claimed or admitted that there was any question of the intent of the testatrix; no one disputed the fact that she had desired and intended to give her property to the university, and that no one else had the slightest moral right to it. The question was simply and solely whether a technical interpretation of the laws affecting the holding of property could be made to give to others what they had no moral claim upon, and to take from the university, and to deflect from its great purpose, a gift of enormous value and potential usefulness, which was morally the absolute property of the institution, and pledged to the specified purpose.

The Surrogate's Court decided in favor of the university: the higher courts of the State, and the Supreme Court of the United States, reversed the finding, and gave the property to the claimants. They now hold it, though every one gaining by the transaction is fully aware that the deceased, if conscious of what is going on here below, must feel that her intent has been defeated; that they have no real right to her property; that the intent must always stand a moral bar to their receiving the money for any other purpose than to carry into effect her intention, defeated as it is, for the moment at least, by the operation of an unexpected legal impediment.

The amount involved approaches \$2,000,000; but legal expenses, and losses in realizing on the property, may bring the net sum below a million and a half. Had this great fund gone into the hands of the trustees of the university, it would have founded perhaps the noblest library on the American continent. As it is, it may be seriously questioned whether it is likely to do much good, even to the legal but yet false inheritors. The daily papers

are full of sensational stories relating to the personal relations of the testatrix, her husband, and the responsible officers of the university; the one side attempting to justify the action of the will-breakers by asserting injustice on the opposite side, the other side defending the action of the university authorities. The public are not concerned in that phase of the matter, and the university authorities evidently feel themselves unaffected by the gossip of the newspapers. Mr. Sage, a year ago, began the erection of a great library building to be given the university as a memorial of the originally intending giver if the suit should be lost, or to be paid for by her bequest should the university hold its own in the case. He gives also \$300,000 as an endowment, the income to be applied solely to the purchase of books. Most colleges would be considered fortunate if given so much, even failing to obtain a \$2,000,000 library. Practically the university gains: it loses a million which it never possessed; but it gains a positive quantity in the half million and over, which is now actually passing into its possession. It is the impression of some of its best-informed friends that it will ultimately actually gain through awakened sympathy and interest, and the gifts likely to be the practical expression of that interest and sympathy, more than the amount now seemingly so unfortunately lost. It is very certain, also, that some of this scattered property will come directly back to the university by the action of the receivers of what they regard as unfairly acquired property.

This affair seems to have no effect on the plans of the university authorities. They will begin the next year with an enlarged teaching force, new and distinguished professors in the faculty, a \$10,000 equipment in illustrations of the work of classical instruction, a new chemical laboratory to accommodate six hundred, a physical laboratory of double the space now occupied, new workshops doubling the present area and capable of handling six hundred Sibley College men, new mechanical laboratory arrangements of nearly proportional extent, a new foundry and new forge large enough to meet a similar growth, and engines (experimental and other), boilers of 600 horse-power, and dynamos more numerous and powerful in the aggregate than can be found elsewhere in the world.

All this looks very much as if Cornell University and the Sibley College of Mechanical and Electrical Engineering were likely to survive for a time still.

HEALTH MATTERS.

Another Forty Days' Fast.

SIGNOR SUCCI, who is gaining the reputation of being a "hunger virtuoso," completed in May a fast of forty days in London. The medical journals of that city credit him with the genuine performance of the feat. Signor Succi has done no more than our own Tanner, but he has been subjected to a more careful physiological study, and he has shown that a forty-days' fast is possible to more than one human being. During the last days of his fast, Succi lost about half a pound a day, his temperature remained normal, but his pulse was more than ordinarily rapid. The lesson of Signor Succi's experiment, says the *Medical Record*, is one that has often been taught before, and it is that people eat too much, and, in this country at least, drink too little. More diseases come from excessive and intemperate feeding than from alcohol, for wrong feeding is the basis of gouty, rheumatic, diabetic, and obese diatheses; as well as of an infinite number of gastrointestinal ills.

Excision of Local Pulmonary Tuberculosis.

At the recent congress of the German Society for Surgery, Professor Tillmanns exhibited a man of about thirty years, from whom he had removed a tubercular deposit involving a portion of the left lung, pleura, and thorax. After the operation the lung contracted in such a manner that by a second operation the remaining tubercular area was completely removed. The wound was covered with cutaneous flaps and healed completely, and the patient is now able to work. As the operation was performed about two years ago, the cure may be regarded as permanent.

Tillmanns thinks that the surgical treatment of pulmonary tuberculosis is proper if the disease is localized, but that in most cases two operations will be required,—the first to expose the affected part in order to bring about atrophy and contraction; the second to remove the disease.

LETTERS TO THE EDITOR.

*** Correspondents are requested to be as brief as possible. The writer's name is in all cases required as proof of good faith.*

The editor will be glad to publish any queries consonant with the character of the journal.

On request, twenty copies of the number containing his communication will be furnished free to any correspondent.

Practical Applications of Meteorology.

IN the United States the making of weather predictions has been the chief use of meteorological observations for so long a time, that few persons have taken the trouble to consider the manifold applications of this class of data. In order to bring this matter to the notice of those who are interested in, but not informed on, this practically very important question, I have given below, in a roughly systematic manner, some few of the many points which should be taken into consideration in the framing of any future plans for extending the usefulness of meteorology in our country. In order to show with any considerable degree of fulness the exact relation of meteorology to practical life, it would be necessary to devote the space allowed for a magazine article to each one of the separate headings which I have assumed as conveniently and appropriately marking the subdivisions of the whole subject; so that, in the present paper, only a few lines can be devoted to each topic. This is mentioned in order to explain the omission of many points which could be readily suggested as being of equal importance with those mentioned.

1. AGRICULTURE.—We have but to note the gradual change in the character of plant-life with the increase of latitude or altitude, in order to see what an all-important factor climate is, in marking the limits of individual plant-growth. Some plants require a preponderance of heat, others of moisture, and still others of sunlight, in order to bring them to maturity. Civilized nations have long since ceased relying on indigenous plants; but, in order to transplant successfully from one country to another, it is necessary to know something of the climates of the two countries. Meteorologists are constantly extending their network of observing-stations, and are thus reducing the areas the climates of which are unknown. When the agricultural physicists shall have determined the climatic constants of all our useful plants, it will be possible to foretell the successful, or the probability of successful, cultivation of any of these plants, when we know the latitude, longitude, and altitude above sea-level, of the place of planting.

We need better systems of estimating the condition of plant-growth during the period from sprouting to ripening (or harvesting). Reliable estimates of this kind would be a valuable criterion for market prices of produce. The usefulness of storm predictions, frost warnings, and cold-wave predictions, is so well established that we only take space to say that the non-fulfilment of the latter causes great loss to farmers who slaughter their own animals.

2. COMMERCE.—In dictating what can or shall not be grown in any particular country, climate controls indirectly the nature of the articles carried from one country to another. Merchants will not send articles intended for a hot climate to a cold climate, and *vice versa*. Still, a great many sailing-vessels are employed in trade, and their navigators pay the strictest attention to the laws of winds which have been discovered to hold good for various quarters of the globe. This knowledge often makes a saving of months in a long voyage. Storm-predictions are of special importance to our coast shipping and to fishermen; but the recent inquiries instituted by the German Government show that storms must be predicted considerably in advance to render such forecasting of real use. In shipping perishable produce it is of great importance to know whether damaging weather is likely to occur during the transit, frosts being the principal danger which the shipper must guard against. A meteorological record extending